

iSHARES INVESTIGATES: MARKET INDEXES AND INDEX INVESTING

Part 1 | The role of index providers

An index is designed to represent and measure the performance of a specific market, asset class, sector, or investment strategy. The S&P 500 Index, for example, tracks 500 of the largest U.S. stocks by market capitalization.

Unlike individual securities, market indexes aren't directly investable. Instead, most investors use index funds, which are designed to track the performance of designated indexes, less fees.

The role of an index

Indexes are used in both index and active investing.

- **Index investing:** This includes mutual funds and exchange traded funds (ETFs) that seek to track the performance of a specified index. These “index” funds provide simple, low-cost ways to gain exposure to the market.
- **Active investing:** Indexes are typically used to measure performance of active funds. Alpha-seeking managers attempt to “beat the market” by outperforming their benchmark—which is usually an index.

Indexes come in all shapes and sizes

Indexing began in equities but has grown to encompass much more. There are millions of indexes spanning all major asset classes, including fixed income, currencies, commodities and real estate (**Figure 1**).

Indexes can be broad—like the Russell 2000, which focuses on small-cap U.S. equities—or track narrower segments of the market, including single countries, specific sectors (e.g., technology), or themes (e.g., clean energy).

Figure 1: Sample indexes by asset class

Equity	Fixed Income	Currency	Commodity	Real Estate
Dow Jones U.S. Health Care Index	ICE U.S. Treasury 7-10 Year Bond Index	ICE U.S. Dollar Index	S&P GSCI Crude Oil Index	Dow Jones U.S. Real Estate Index
FTSE China 50 Index	S&P Green Bond index	ICE Euro FX Index	Bloomberg Sugar Subindex	MSCI China Real Estate 10/50 Index
Morningstar Large Growth Index	Bloomberg Barclays US Corporate High Yield Total Return Index	S&P Chinese Renminbi Index	Bloomberg Precious Metals Subindex	Fundamental Income Net Lease Real Estate Index
MSCI ACWI Minimum Volatility (USD) Index	Markit iBoxx USD Liquid Investment Grade Index	S&P Indian Rupee Index	UBS Bloomberg CMCI Livestock Index Total Return	Benchmark Industrial Real Estate SCTR Index

The above table is for illustration purposes only. It serves as a general overview and is not exhaustive.

Index providers create and maintain indexes

Index providers, like MSCI and S&P Dow Jones Indices, are responsible for constructing and monitoring a wide variety of indexes.

Each provider uses a unique, rules-based methodology to build their indexes. This methodology is used to define the scope of the index, such as which securities or financial instruments are included and their respective weightings.

Index providers monitor not just the market but also regulatory and corporate events for ongoing index maintenance. For example, providers may need to rebalance the index—or adjust the weighting of constituent securities—based on corporate actions (e.g., stock splits) or changing market conditions.

The composition of indexes changes frequently

During periodic reviews, index providers may make changes to their indexes. For example, a provider will remove securities that no longer meet the criteria for index inclusion as outlined in its construction methodology.

Alternatively, an index provider may add a security if it becomes eligible for inclusion (e.g., if a private company takes its shares public).

Index providers also contend with macroeconomic events, like geopolitical tensions that result in country-wide or firm-specific sanctions, and adjust their indexes accordingly.

For example, in July 2019, U.S. sanctions on Venezuela sparked liquidity concerns around Venezuelan bonds. As a result, JP Morgan reduced the weight of Venezuela's sovereign bonds to zero in its debt indexes.

Fund managers manage funds, not indexes

Index fund managers often engage with multiple index providers. The top index providers for U.S.-listed index ETFs and index mutual funds are shown below (**Figure 2**).

Index providers license their indexes to asset managers and other financial institutions for a variety of uses, including benchmarking investments.

Index fund managers outline their investment objectives and determine which index benchmarks will best align with those objectives—and, ultimately, the needs of investors.

Figure 2: Top index providers by AUM¹

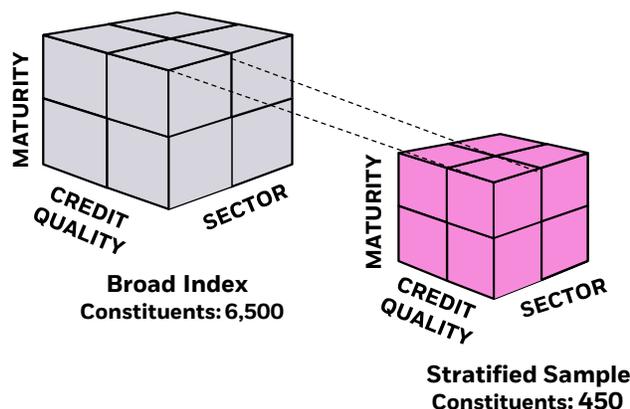
Index ETFs			Index Mutual Funds		
Provider	AUM	Market Share	Provider	AUM	Market Share
S&P Dow Jones	\$ 1,470,572,426,245	33%	S&P Dow Jones	\$ 1,321,161,738,198	32%
MSCI	\$ 616,058,680,665	14%	CRSP	\$ 1,151,302,758,617	28%
FTSE Russell	\$ 591,722,017,345	13%	Bloomberg Barclays	\$ 765,671,330,227	18%
Bloomberg Barclays	\$ 452,017,722,558	10%	FTSE Russell	\$ 650,795,559,225	16%
CRSP	\$ 365,330,314,840	8%	MSCI	\$ 196,402,012,650	5%

¹ Source: Markit, Morningstar as of 31 December 2019. AUM and market share of U.S.-listed index funds only; does not include AUM of active funds that are benchmarked to a particular index.

Managers of index mutual funds and ETFs strive to track the performance of a fund's underlying index as closely as possible. This can be achieved in two ways:

- **Full replication.** A fund may exactly match the composition of the index by holding every security at the same weight as the index.
- **Owning a subset of the index.** In some instances, such as funds that transact in less liquid fixed income markets, it may be difficult or impossible to purchase every index component. (In fact, some bond indexes have thousands of securities.) Instead, portfolio managers may seek to deliver index-like risk and return characteristics by holding and managing a representative sample of index securities (**Figure 3**).

Figure 3: Example of sampling



For illustrative purposes only.

There's nothing 'passive' about index fund management

Some people think that index funds are managed by computers. In reality, a lot of work gets done behind the scenes by skilled portfolio managers.

For example, during index rebalances and reconstitutions—reweighting and deleting or adding securities, respectively—index fund managers must rebalance or reconstitute their portfolios accordingly.

While indexes assume an immediate, frictionless, and costless implementation of changes, index fund managers are faced with transaction costs, risks, and other frictions when they execute trades in their portfolios.

At the same time, when trading around index events, index fund managers have control and exercise discretion in seeking to track the index and maximize shareholder value.

This means that index fund managers must review information about upcoming index changes and have an implementation plan in place to buy or sell securities to align their portfolio with the index in a way that balances risk, return, and cost.

Other responsibilities may include tracking corporate actions that can impact the composition of an index, reinvesting dividend or interest payments received from a fund's portfolio holdings, and monitoring risk in their portfolios and in the market.

In instances where a portfolio holds a sample of an index's securities, portfolio managers have discretion over security selection and can choose which securities to add or remove from the portfolio in order to continue tracking the index while aiming to minimize transaction costs and taxes.

Two distinct roles of equal importance

While index providers and index fund managers play different roles, they are equally important to the index investing landscape.

Index funds provide a way for investors to build diversified portfolios in a cost-efficient manner. This would not be possible without the efforts of index providers to build and maintain the index methodologies that underlie these funds.

As index investing continues to grow, it will be important for investors to understand the crucial, yet distinct, roles that these market participants play.

ETFs and mutual funds: Know the differences

- **Strategy:** Fund management styles are typically categorized as “active” or “index”. Active funds (most mutual funds) seek to outperform market indexes, while “index” funds (some mutual funds and most ETFs) seek to match the fund’s performance to an established market index, such as the S&P 500.
- **Trading:** Mutual funds are bought and sold directly from the mutual fund company at the current day’s closing price, or the Net Asset Value (NAV). ETFs are traded throughout the day at the current market price, like a stock, and may cost slightly more or less than NAV. Mutual fund transactions do not include commissions to a brokerage, while some ETF transactions do.
- **Transaction fees:** For mutual funds, transaction fees may include sales charges (sales loads) or redemption fees. These are paid directly by investors. ETF transactions may include brokerage commissions (like stocks), which are paid directly by investors.
- **Tax implications:** Mutual fund shareholders redeem shares directly from the fund, so the fund manager must often sell fund securities to honor redemptions, potentially triggering capital gains for the fund’s remaining shareholders. Because ETF investors buy and sell shares with other investors on an exchange, the ETF manager doesn’t have to sell holdings – potentially creating capital gains – to meet investor redemptions. ETF shareholders can incur tax consequences when they sell shares on the exchange, but that tax consequence is not passed on to other ETF shareholders.
- **Transparency:** ETFs generally disclose holdings daily. Mutual funds generally disclose holdings quarterly.

	Mutual Funds	Index Mutual Funds	ETFs	Stocks
Diversified	✓	✓	✓	
Traded on exchange			✓	✓
Intraday pricing			✓	✓
Intraday trading			✓	✓
Management fees	✓	✓	✓	
Commission fees			✓	✓
Tax management*			✓	✓
Index-tracking		✓	✓	

* Due to fund structure, mutual fund holders may be subject to taxable capital gains distributions due to other investors’ redemptions directly to the mutual fund. Taxable capital gain distributions can occur to ETF investors based on stocks trading within the fund as the ETF creates and redeems shares and rebalances its holdings. ETFs and stocks will also distribute taxable capital gains when an investor sells their own shares. Certain traditional mutual funds can also be tax efficient.

Risks

Capital at risk. The value of investments and the income from them can fall as well as rise and are not guaranteed. Investors may not get back the amount originally invested.

Past performance is not a reliable indicator of current or future results and should not be the sole factor of consideration when selecting a product or strategy.

Changes in the rates of exchange between currencies may cause the value of investments to diminish or increase. Fluctuation may be particularly marked in the case of a higher volatility fund and the value of an investment may fall suddenly and substantially. Levels and basis of taxation may change from time to time.

All figures are denominated in U.S. dollars, unless otherwise noted.

Important Information about iShares ETFs

For U.S. investors: Carefully consider the Funds' investment objectives, risk factors, and charges and expenses before investing. This and other information can be found in the Funds' prospectuses or, if available, the summary prospectuses which may be obtained by visiting www.iShares.com or www.blackrock.com. Read the prospectus carefully before investing.

Investing involves risk, including possible loss of principal.

This material is provided for educational purposes only and is not intended to constitute investment advice or an investment recommendation within the meaning of federal, state or local law. You are solely responsible for evaluating and acting upon the education and information contained in this material. The information and opinions are derived from proprietary and non-proprietary sources deemed by BlackRock to be reliable, are not necessarily all-inclusive and are not guaranteed as to accuracy. BlackRock will not be liable for direct or incidental loss resulting from applying any of the information obtained from these materials or from any other source mentioned. BlackRock does not render any legal, tax or accounting advice and the education and information contained in this material should not be construed as such. Please consult with a qualified professional for these types of advice.

Shares of iShares ETFs may be bought and sold throughout the day on the exchange through any brokerage account. Shares are not individually redeemable from the ETF, however, shares may be redeemed directly from an ETF by Authorized Participants, in very large creation/redemption units.

Buying and selling shares of ETFs may result in brokerage commissions. Diversification may not protect against market risk or loss of principal.

There can be no assurance that an active trading market for shares of an ETF will develop or be maintained.

Investment comparisons are for illustrative purposes only. To better understand the similarities and differences between investments, including investment objectives, risks, fees and expenses, it is important to read the products' prospectuses.

This information should not be relied upon as research, investment advice, or a recommendation regarding any products, strategies, or any security in particular. This material is strictly for illustrative, educational, or informational purposes and is subject to change. This material does not constitute an offer or solicitation in any jurisdiction where or to any persons to whom it would be unauthorized or unlawful to do so.

Prepared by BlackRock Investments, LLC (together with its affiliates, "BlackRock").

This material is intended for the following audiences in each respective country or region: In the U.S: public distribution. **In Canada:** public distribution. **In the UK and EEA: Professional Clients (as defined by the Financial Conduct Authority or MiFID Rules) and Qualified Investors only and should not be relied upon by any other persons.**

Until 31 December 2020, issued by BlackRock Advisors (UK) Limited, authorised and regulated by the Financial Conduct Authority. Registered office: 12 Throgmorton Avenue, London, EC2N 2DL. Tel: +44 (0)20 7743 3000. Registered in England and Wales No. 00796793. For your protection, telephone calls are usually recorded. Please refer to the Financial Conduct Authority website for a list of authorised activities conducted by BlackRock.

From 1 January 2021, in the event the United Kingdom and the European Union do not enter into an arrangement which permits United Kingdom firms to offer and provide financial services into the European Economic Area, the issuer of this material is:

- (i) BlackRock Advisors (UK) Limited for all outside of the European Economic Area; and
- (ii) BlackRock (Netherlands) B.V. for in the European Economic Area,

BlackRock (Netherlands) B.V. is authorised and regulated by the Netherlands Authority for the Financial Markets. Registered office Amstelplein 1, 1096 HA, Amsterdam, Tel: 020 – 549 5200, Tel: 31-20-549-5200. Trade Register No. 17068311 For your protection telephone calls are usually recorded.

FOR QUALIFIED INVESTORS IN SWITZERLAND: This document is marketing material. This document shall be exclusively made available to, and directed at, qualified investors as defined in the Swiss Collective Investment Schemes Act of 23 June 2006, as amended (“CISA”).

In DIFC: The information contained in this document is intended strictly for Professional Clients as defined under the Dubai Financial Services Authority (“DFSA”) Conduct of Business (COB) Rules.

The information contained in this document, does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for or an opinion or guidance on a financial product, service and/or strategy. Whilst great care has been taken to ensure that the information contained in this document is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of BlackRock.

The information contained in this document is for information purposes only. It is not intended for and should not be distributed to, or relied upon by, members of the public.

The information contained in this document, may contain statements that are not purely historical in nature but are “forward-looking statements”. These include, amongst other things, projections, forecasts or estimates of income. These forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials. If you do not understand the contents of this document, you should consult an authorised financial adviser.

In Singapore, public distribution. Issued by BlackRock (Singapore) Limited (Co. registration no. 200010143N). This advertisement or publication has not been reviewed by the Monetary Authority of Singapore. **In Hong Kong,** public distribution. Issued by BlackRock Asset Management North Asia Limited. This material not been reviewed by the Securities and Futures Commission of Hong Kong. **In South Korea,** Qualified Professional Investors (as defined in the Financial Investment Services and Capital Market Act and its sub-regulations). Issued by BlackRock Investment (Korea) Limited. **In Taiwan,** Professional Investors. Independently operated by BlackRock Investment Management (Taiwan) Limited. Address: 28F., No. 100, Songren Rd., Xinyi Dist., Taipei City 110, Taiwan. Tel: (02)23261600

In Japan, Professional Investors only (Professional Investor is defined in Financial Instruments and Exchange Act). Issued by BlackRock Japan Co., Ltd. (Financial Instruments Business Operator: The Kanto Regional Financial Bureau. License No375, Association Memberships: Japan Investment Advisers Association, the Investment Trusts Association, Japan, Japan Securities Dealers Association, Type II Financial Instruments Firms Association.) **In Australia**, public distribution. Issued by BlackRock Investment Management (Australia) Limited ABN 13 006 165 975 AFSL 230 523 (BIMAL). This material is not a financial product recommendation or an offer or solicitation with respect to the purchase or sale of any financial product in any jurisdiction. The material provides general information only and does not take into account your individual objectives, financial situation, needs or circumstances. **In China**, this may not be distributed to individuals resident in the People's Republic of China ("PRC", for such purposes, excluding Hong Kong, Macau and Taiwan) or entities registered in the PRC unless such parties have received all the required PRC government approvals to participate in any investment or receive any investment advisory or investment management services. **For Other APAC Countries**, Institutional Investors only (or professional/sophisticated /qualified investors, as such term may apply in local jurisdictions) and does not constitute investment advice or an offer or solicitation to purchase or sell in any securities, BlackRock funds or any investment strategy nor shall any securities be offered or sold to any person in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities laws of such jurisdiction. **In Latin America**, institutional investors and financial intermediaries only (not for public distribution). This material is for educational purposes only and does not constitute investment advice nor an offer or solicitation to sell or a solicitation of an offer to buy any shares of any Fund (nor shall any such shares be offered or sold to any person) in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities law of that jurisdiction. If any funds are mentioned or inferred to in this material, it is possible that some or all of the funds may not have been registered with the securities regulator of Argentina, Brazil, Chile, Colombia, Mexico, Panama, Peru, Uruguay or any other securities regulator in any Latin American country and thus might not be publicly offered within any such country. The securities regulators of such countries have not confirmed the accuracy of any information contained herein. **Mexico.** For institutional investors and financial intermediaries only. Investing involves risk, including possible loss of principal. This material is provided for educational and informational purposes only and does not constitute an offer or solicitation to sell or a solicitation of an offer to buy any shares of any fund or security. It is your responsibility to inform yourself of, and to observe, all applicable laws and regulations of Mexico. If any funds, securities or investment strategies are mentioned or inferred in this material, such funds, securities or strategies have not been registered with the Mexican National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores, the "CNBV") and thus, may not be publicly offered in Mexico. The CNBV has not confirmed the accuracy of any information contained herein. The provision of investment management and investment advisory services ("Investment Services") is a regulated activity in Mexico, subject to strict rules, and performed under the supervision of the CNBV. BlackRock México Operadora, S.A. de C.V., Sociedad Operadora de Fondos de Inversión ("BlackRock México Operadora") is a Mexican subsidiary of BlackRock, Inc., authorized by the CNBV as a Mutual Fund Manager (Operadora de Fondos), and as such, authorized to manage Mexican mutual funds, ETFs and provide Investment Advisory Services. For more information on the Investment Services offered by BlackRock Mexico, please review our Investment Services Guide available in <https://www.BlackRock.com/mx>. This material represents an assessment at a specific time and its information should not be relied upon by the you as research or investment advice regarding the funds, any security or investment strategy in particular. Reliance upon information in this material is at your sole discretion. BlackRock México is not authorized to receive deposits, carry out intermediation activities, or act as a broker dealer, or bank in Mexico. For more information on BlackRock México, please visit: <https://www.BlackRock.com/mx>. BlackRock receives revenue in the form of advisory fees for our advisory services and management fees for our mutual funds, exchange traded funds and collective investment trusts.

©2020 BlackRock, Inc. All rights reserved. **iSHARES** and **BLACKROCK** are registered trademarks of BlackRock, Inc., or its subsidiaries. All other marks are the property of their respective owners.